ECLSS/EVA Splinter Group Discussion Structure

The objective of this workshop has been stated "….to understand the safety and critical engineering considerations for lunar dust with respect to the early Constellation program." In order to keep splinter group discussions focused and to be able to out-brief a comprehensive summary of what we have done to date each morning, I propose that we follow the following structure. The structure is built around the agenda items that were provided earlier.

Day 1 Splinter

Discussion Topic(s):

1. Design of the EVA system for dust tolerance
    a. Suit Design
    b. Connector design
    c. Sample container design
    d. Maintenance
    e. Visor design
    f. Lights design
2. Design of the EVA system for minimization of dust collection and transport
    a. Suit Design
    b. Sample container design
    c. Maintenance
    d. Rover
    e. Habitat
    f. LSAM

Create Out-brief summary for Day 2 Morning (Observations, Recommendations, Findings and Alternatives Views related to the following):

1. Primary areas of concern for dust as related Space Suit design
2. Most promising candidates for design based on known requirements and constraints
3. Areas where no design solutions are currently being worked
4. Areas identified to be:
    a. Crew Life Critical
    b. Mission Critical
    c. Important Short Term Information
    d. Important Long Term Information

Note: During the out-brief on the morning of Day 1, The EVA/ ECLAA Splinter Group will request information needed from other groups.

Day 2 Splinter
Discussion Topic(s):

1. Design of the EVA, Airlock, Vehicle, and Habitat Systems for minimization of dust transport into the habitable volume
    a. Dust removal prior to airlock ingress
    b. Dust removal and control in airlock
    c. Dust control in habitable volumes

Create Out-brief summary for Day 3 Morning (Observations, Recommendations, Findings and Alternatives Views related to the following):

1. Primary areas of concern as related to EVA, airlock and vehicle systems design for dust control and mitigation
2. Most promising candidates for control and mitigation based on known requirements and constraints
3. Areas where no mitigations are currently being worked
4. Areas identified to be:
    a. Crew Life Critical
    b. Mission Critical
    c. Important Short Term Information
    d. Important Long Term Information
5. Identified what is data or requirements needed from the dust research and medical groups for design needs of suits and spacecrafts

Day 3 Splinter

Discussion Topic(s):

1. Design for dust detection and control within the habitable volume
2. Design of the ECLSS system for dust tolerance dust control and removal
3. Personal Hygiene

Create Day 3 afternoon out-brief summary (Observations, Recommendations, Findings and Alternatives Views related to the following):

1. Primary areas of concern as related to dust collection and control and ECLSS tolerance to dust within the habitable volume
2. Primary areas of concern as related to personal hygiene as related to dust
3. Most promising candidates for control and mitigation based on known requirements and constraints
4. Areas where no Design solutions or mitigations are currently being worked
5. Areas identified to be:
    a. Crew Life Critical
    b. Mission Critical
    c. Important Short Term Information
    d. Important Long Term Information